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APPENDIX 6A
INSPECTION SCHEDULES

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INSPECTION SCHEDULES

This section provides example WTP inspection schedules showing inspection frequencies and what to look for. These example inspection schedules list the monitoring equipment, safety and emergency equipment, security devices, preparedness and prevention equipment, and operating and structural equipment that help prevent, detect, or respond to environmental or human health hazards related to mixed and dangerous waste. A copy of the current and complete inspection schedules will be retained at the WTP or other approved locations.

Table 6A-1 contains examples of the general inspection requirements. The remaining tables are organized by type of waste management unit. Following is a list of tables and their locations included in this Appendix.

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Table 6A-1 Example WTP General Inspection Schedule

Component Name	Inspection	Frequency
Security Devices		
WTP inner fence	Check for damaged fencing	Monthly
Posted warning signs (see Section 6.1.1.3) that say: “DANGER – UNAUTHORIZED PERSONNEL KEEP OUT” (or equivalent)	Verify signs are present, legible, and visible; ensure buildings or rooms containing dangerous or mixed waste are posted	Monthly
Points of access to active portions turnstiles, doors, and/or magnetic encoded bar readers	Verify operability	Monthly
Emergency Preparedness Equipment		
Safety showers and eyewash stations	Verify operability and sufficient pressure	Weekly
Automatic fire suppression system(s)	Verify operability	Annually
Portable fire extinguishers (all types)	Check for adequate charge	Monthly
Emergency lighting	Test operability	Monthly
Spill kit and spill control equipment	Verify contents complete	Quarterly
Emergency sirens and alarms	Verify operability	Monthly
Voice paging system (pagers or PA system)	Verify operability	Monthly
Crash alarm telephone system	Verify operability	Monthly
Emergency telephones	Verify operability	Monthly
Personal protective clothing and equipment	Ensure supplies meet ERP listing and requirements	Quarterly
Power Supply Inspections		
Emergency uninterruptible power supply system(s)	Verify operability	Annual
Emergency diesel generator	Perform no-load test and verify sufficient fuel	Annual

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Table 6A-2 Example Container and Container Storage Area Inspection Schedules

Name	Inspection	Frequency
Dangerous and/or Mixed Waste Container Storage Areas		
<ul style="list-style-type: none"> • HLW Vit Plant container storage areas Nos. 1, 2 & 3 • LAW Vit Plant container storage area • Non-rad dangerous waste container storage area • Central waste container storage area • HLW Out-of-Service Melters • LAW Out-of-Service Melters 	<p>Verify major risk labels present and legible, ensure all containers closed (except when waste is being added to container); Check that container storage areas are free of liquid and debris; Check for significant cracks, gaps, and other signs of deterioration of storage area floors;</p> <p>Verify minimum 30 inches of aisle space between containers rows; Ensure that any containers holding free liquids have portable secondary containment and no liquids accumulated in portable secondary containment</p>	Weekly
Immobilized HLW and LAW Containers		
Empty containers (canisters) for immobilized LAW and HLW waste)	Inspect container for liquid or debris inside, cracks, dents, bulges, gouges, or other abnormalities	Prior to filling
Filled IHLW and ILAW containers (canisters)	Inspect (by camera surveillance or cell window) each container for cracks, leaks, bulges, or other abnormalities	After sealing container
	<p>Record in tracking system each container's location when placed in storage;</p> <p>Record in tracking system all container location changes if container(s) are moved while in storage;</p> <p>Verify container in recorded location when transporting container out of WTP storage</p>	Within 48 hours of placing or moving each container
HLW and LAW Vitrification Plants' Container Storage Areas		
IHLW and ILAW container storage areas	<p>Visually check for liquid, foreign material, or debris in storage area;</p> <p>Check for deformities in storage area floors</p>	Weekly when facility is storing waste in immobilized waste container storage area
ILAW buffer container storage area	<p>Visually check (camera surveillance or other remote means) for damaged containers;</p> <p>Check for liquids, foreign materials or debris in storage area;</p> <p>Check for cracks and deformities in storage area</p>	Weekly when facility is storing waste

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Table 6A-3 Example Tank Systems Inspection Schedule

Component Name	Plant item number	Inspection	Frequency
Pretreatment Plant Tank System			
FRP			
Waste feed receipt vessels	V11020A, V11020B, V11020C, V11020D	Inspect tank level monitoring data to prevent overflow	Daily
FEP			
Evaporator feed vessels	V11001A, V11001B	Inspect tank level monitoring data to prevent overflow	Daily
Waste feed evaporator separator vessels	V11002A, V11002B	Inspect tank level monitoring data to prevent overflow	Daily
Evaporator process condensate pot	V11005	Inspect tank level monitoring data to prevent overflow	Daily
HLP			
Strontium/transuranic lag storage vessels	V12001A, V12001C,	Inspect tank level monitoring data to prevent overflow	Daily
Lag storage vessels	V12001D, V12001E	Inspect tank level monitoring data to prevent overflow	Daily
HLW feed blending vessel	V12007	Inspect tank level monitoring data to prevent overflow	Daily
UFP			
Evaporator concentrate buffer vessels	V12010A & V12010B	Inspect tank level monitoring data to prevent overflow	Daily
Ultrafiltration feed vessels	V12011A & V12011B	Inspect tank level monitoring data to prevent overflow	Daily
LAW permeate hold vessels	V12015A, V12015B, V12015C	Inspect tank level monitoring data to prevent overflow	Daily
Ultrafilters	G12002A, G12002B, G12003A, G12003B, G12004A, G12004B	Inspect tank level monitoring data to prevent overflow	Daily

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Component Name	Plant item number	Inspection	Frequency
CXP			
LAW feed vessel	V13001	Inspect tank level monitoring data to prevent overflow	Daily
Cesium ion exchange columns	C13001, C13002, C13003, C13004	Inspect column monitoring data to prevent release	Daily
Caustic rinse collection vessel	V13008	Inspect tank level monitoring data to prevent overflow	Daily
CNP			
Recovered nitric acid vessel	V13028	Inspect tank level monitoring data to prevent overflow	Daily
Eluate contingency storage vessel	V13073	Inspect tank level monitoring data to prevent overflow	Daily
Cesium concentrate lute pot	V13030	Inspect tank level monitoring data to prevent overflow	Daily
PVP			
HEME drain collection vessels	V15326 & V15327	Inspect tank level monitoring data to prevent overflow	Daily
Condensate collection vessel	V15038	Inspect tank level monitoring data to prevent overflow	Daily
Vessel vent header collection vessel	V15052	Inspect tank level monitoring data to prevent overflow	Daily
PWD			
Primary alkaline effluent vessel	V45013	Inspect tank level monitoring data to prevent overflow	Daily
Secondary alkaline effluent vessel	V45018	Inspect tank level monitoring data to prevent overflow	Daily
Ultimate overflow vessel	V15009B	Inspect tank level monitoring data to prevent overflow	Daily
Plant wash vessel	V15009A	Inspect tank level monitoring data to prevent overflow	Daily

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Component Name	Plant item number	Inspection	Frequency
Acidic effluent vessel	V15013	Inspect tank level monitoring data to prevent overflow	Daily
Contaminated effluent vessel	V15018	Inspect tank level monitoring data to prevent overflow	Daily
HLW effluent transfer vessel	V12002	Inspect tank level monitoring data to prevent overflow	Daily
C3 floor drains tank	V15319	Inspect tank level monitoring data to prevent overflow	Daily
TLP			
Evaporator separator vessel	V41011	Inspect tank level monitoring data to prevent overflow	Daily
Process condensate hold vessel	V41013	Inspect tank level monitoring data to prevent overflow	Daily
Plant wash vessels	V45009A & V45009B	Inspect tank level monitoring data to prevent overflow	Daily
TCP			
LAW buffer storage vessel	V41001	Inspect tank level monitoring data to prevent overflow	Daily
RDP			
Spent resin collection vessels	V43135A & V43135B	Inspect tank level monitoring data to prevent overflow	Daily
Resin flush collection vessel	V43136	Inspect tank level monitoring data to prevent overflow	Daily
TXP			
Technetium ion exchange columns	C43006, C43007, C43008, C43009	Inspect column monitoring data to prevent overflow	Daily
Caustic rinse collection vessel	V43056	Inspect tank level monitoring data to prevent overflow	Daily
Technetium ion exchange buffer vessel	V43001	Inspect vessel level monitoring data to prevent overflow	Daily

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Component Name	Plant item number	Inspection	Frequency
Treated LAW buffer vessels	V43110A, V43110B, V43110C	Inspect tank level monitoring data to prevent overflow	Daily
TEP			
Technetium eluant recovery evaporator	V43069	Inspect tank level monitoring data to prevent overflow	Daily
Recovered technetium eluant vessel	V43071	Inspect tank level monitoring data to prevent overflow	Daily
Technetium concentrate lute pot	V43072	Inspect tank level monitoring data to prevent overflow	Daily
RLD			
Process condensate vessels	V45028A & V45028B	Inspect tank level monitoring data to prevent overflow	Daily
LAW Vitrification Plant Tank System			
LCP			
Melter 1 concentrate receipt vessel	V21001	Inspect tank level monitoring data to prevent overflow	Daily
Melter 2 concentrate receipt vessel	V21002	Inspect tank level monitoring data to prevent overflow	Daily
Melter 3 concentrate receipt vessel	V21003	Inspect tank level monitoring data to prevent overflow	Daily
LFP			
Melter 1 feed preparation vessel	V21101	Inspect tank level monitoring data to prevent overflow	Daily
Melter 1 feed vessel	V21102	Inspect tank level monitoring data to prevent overflow	Daily
Melter 2 feed preparation vessel	V21201	Inspect tank level monitoring data to prevent overflow	Daily
Melter 2 feed vessel	V21202	Inspect tank level monitoring data to prevent overflow	Daily
Melter 3 feed preparation vessel	V21301	Inspect tank level monitoring data to prevent overflow	Daily

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Component Name	Plant item number	Inspection	Frequency
Melter 3 feed vessel	V21302	Inspect tank level monitoring data to prevent overflow	Daily
LVP			
LAW caustic scrubber blowdown vessel	V22001	Inspect tank level monitoring data to prevent overflow	Daily
LOP			
Melter 1 SBS condensate vessel	V22101	Inspect tank level monitoring data to prevent overflow	Daily
Melter 2 SBS condensate vessel	V22201	Inspect tank level monitoring data to prevent overflow	Daily
Melter 3 SBS condensate vessel	V22301	Inspect tank level monitoring data to prevent overflow	Daily
RLD			
Plant wash vessel	V25001	Inspect tank level monitoring data to prevent overflow	Daily
LAW C3/C5 effluent collection vessel	V25002	Inspect tank level monitoring data to prevent overflow	Daily
SBS condensate collection vessel	V25003	Inspect tank level monitoring data to prevent overflow	Daily
HLW Vitrification Plant Tank System			
HCP			
Concentrate receipt vessel 1	V31001	Inspect tank level monitoring data to prevent overflow	Daily
Concentrate receipt vessel 2	V31002	Inspect tank level monitoring data to prevent overflow	Daily
HOP			
SBS condensate collection vessel	V32101	Inspect tank level monitoring data to prevent overflow	Daily
HDH			
Canister decontamination vessel	V33001	Inspect tank level monitoring data to prevent overflow	Daily

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Component Name	Plant item number	Inspection	Frequency
Waste neutralization vessel	V33002	Inspect tank level monitoring data to prevent overflow	Daily
Canister bogie decontamination vessel	V33004	Inspect tank level monitoring data to prevent overflow	Daily
RLD			
Acidic waste vessel	V35002	Inspect tank level monitoring data to prevent overflow	Daily
Plant wash and drains vessel	V35003	Inspect tank level monitoring data to prevent overflow	Daily
Decontamination effluent collection vessel	V35009	Inspect tank level monitoring data to prevent overflow	Daily
Offgas drains collection vessel	V35038	Inspect tank level monitoring data to prevent overflow	Daily
HFP			
Feed preparation vessel	V31101	Inspect tank level monitoring data to prevent overflow	Daily
HLW melter feed vessel	V31102	Inspect tank level monitoring data to prevent overflow	Daily
Analytical Laboratory Tank System			
LAB			
Lab liquid effluent collection vessels	V60001a & V60001b	Inspect tank level monitoring data to prevent overflow	Daily
Plant Sumps as identified in Chapter 4: Leak Detection for Primary Containment			
Leak detectors located in secondary containment for all tank systems, container storage areas, miscellaneous units, and containment buildings managing dangerous and/or mixed waste	Monitor cell leak detection instrumentation or monitoring data to detect leaks		Daily
Underground Piping (receiving from DST and transferring out)			
Leak detectors	Monitor cell leak detection instrumentation or monitoring data to detect leaks		Daily

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Table 6A-4 Example Cathodic Protection Inspection Schedule-Dangerous Waste Transfer Lines

Component Name and Line Number	Inspection	Frequency
Cathodic protection systems for dangerous and mixed waste transfer lines	Verify proper operation	<ul style="list-style-type: none"> • Initial (less than 6 months after installation) • Annually (from date of initial installation inspection, above)
All sources of impressed current supporting cathodically protected dangerous and mixed waste transfer lines	Test for proper function	Bi-monthly

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Table 6A-5 Example Ignitable or Reactive Wastes Inspection Schedule

Component Name	Inspection	Frequency
Receipt tanks	Inspect, by qualified personnel or in the presence of fire marshal, for compliance with Uniform Fire Code and enter inspection into operating record	365 days
Containers and container storage areas storing ignitable or reactive waste	<p>Inspect, by professional person or in the presence of fire marshal for compliance with Uniform Fire Code and enter inspection into operating record.</p> <p>Inspect containers and container storage areas for compliance with WAC 173-303-630(8) requirements.</p>	365 days

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Table 6A-6 Example Miscellaneous Unit Inspection Schedule

Component Name	Inspection	Frequency
LAW & HLW Melters	<ul style="list-style-type: none"> • Visual inspection (via cave window or CCTV if provided) for damage, leaks, or abnormalities • Inspect melter level monitoring data to prevent overflow 	Daily

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Table 6A-7 Example Containment Buildings Inspection Schedule

Component Name	Inspection	Frequency
<ul style="list-style-type: none"> • Containment building areas as designated in Chapter 4 	<ul style="list-style-type: none"> • Visual of area surrounding containment building to detect signs of releases of hazardous waste • Primary barrier in low or no radiation zones – look for significant cracks, gaps, corrosion or other signs of deterioration, look for liquid on floor. • High radiation areas – check differential pressure monitoring records to ensure negative pressure in containment building area 	Weekly

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